Washington State Institute for Public Policy

Workforce Development Benefit-Cost Results

The WSIPP benefit-cost analysis examines, on an apples-to-apples basis, the monetary value of programs or policies to determine whether the benefits from the program exceed its costs. WSIPP's research approach to identifying evidence-based programs and policies has three main steps. First, we determine "what works" (and what does not work) to improve outcomes using a statistical technique called meta-analysis. Second, we calculate whether the benefits of a program exceed its costs. Third, we estimate the risk of investing in a program by testing the sensitivity of our results. For more detail on our methods, see our technical documentation.

Current estimates replace old estimates. Numbers will change over time as a result of model inputs and monetization methods.

Case management for unemployment insurance claimants

Benefit-cost estimates updated December 2015. Literature review updated November 2015.

Program Description: Case managers work with Unemployment Insurance (UI) claimants in individual or group sessions to provide counseling, job search assistance or job retention services through orientations, assessments, interviews, or telephone calls. Case managers usually provide referrals to child care subsidies, transportation assistance, and other support services. They may also refer clients to education and training, particularly if job searches are unsuccessful. Case management may end when clients find employment, or continue with post-employment support services. UI programs usually provide these services to eligible dislocated workers, lasting anywhere from one week to three months.

Benefit-Cost Summary

Program benefits	
Participants	$2,673
Taxpayers	$1,140
Other (1)	$0
Other (2)	($90)
Total	$3,723
Costs	($180)
Benefits minus cost	$3,543

Summary statistics	
Benefit to cost ratio	$20.70
Benefits minus costs	$3,543
Probability of a positive net present value	69 %

The estimates shown are present value, life cycle benefits and costs. All dollars are expressed in the base year chosen for this analysis (2014). The economic discount rates and other relevant parameters are described in our technical documentation.

Detailed Monetary Benefit Estimates

Source of benefits	Benefits to Participants	Taxpayers	Other (1)	Other (2)	Total benefits
From primary participant					
Labor market earnings (employment)	$2,673	$1,140	$0	$0	$3,813
Adjustment for deadweight cost of program	$0	$0	$0	($90)	($90)
Totals	$2,673	$1,140	$0	($90)	$3,723

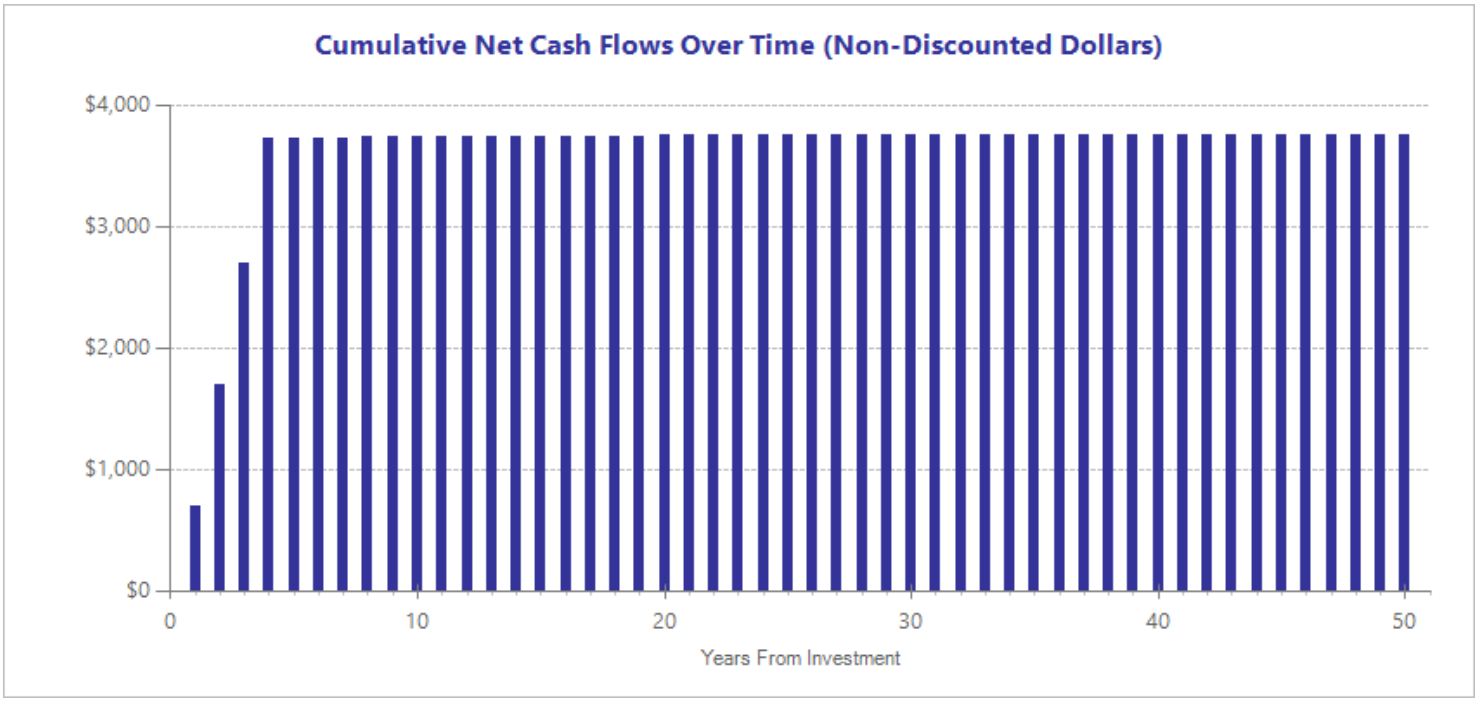
We created the two “other” categories to report results that do not fit neatly in the “participant” or “taxpayer” perspectives. In the “Other (1)” category we include the benefits of reductions in crime victimization, the economic spillover benefits of improvement in human capital outcomes, and the benefits from private or employer-paid health insurance. In the “Other (2)” category we include estimates of the net changes in the value of a statistical life and net changes in the deadweight costs of taxation.

Detailed Cost Estimates

	Annual cost	Program duration	Year dollars	Summary statistics	
Program costs	$180	1	2014	Present value of net program costs (in 2014 dollars)	($180)
Comparison costs	$0	1	2014	Uncertainty (+ or - %)	75 %

We estimated the average annual cost of treatment per participant, using data from studies in our meta-analysis that reported cost estimates (Black et al., 2003; Decker et al., 2000; Michaelides et al., 2012). Costs vary by study but may include central administration, staff salaries, staff benefits, recruitment, assessment services, job placement and retention services, short-term training provided by staff, transportation, and medical treatments.

The figures shown are estimates of the costs to implement programs in Washington. The comparison group costs reflect either no treatment or treatment as usual, depending on how effect sizes were calculated in the meta analysis. The uncertainty range is used in Monte Carlo risk analysis, described in our technical documentation.



Meta-Analysis of Program Effects

Outcomes measured	Primary or secondary participant	No. of effect sizes	Treatment N	Unadjusted effect size (random effects model)		Adjusted effect sizes and standard errors used in the benefit-cost analysis					
						First time ES is estimated			Second time ES is estimated		
				ES	p-value	ES	SE	Age	ES	SE	Age
Earnings	Primary	11	102201	0.036	0.019	0.036	0.015	42	0.000	0.014	43
Employment	Primary	13	209702	-0.002	0.820	-0.002	0.007	42	0.000	0.014	43

Citations Used in the Meta-Analysis

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Training with work experience for adult welfare recipients

Benefit-cost estimates updated December 2015. Literature review updated November 2015.

Program Description: Adult TANF/AFDC recipients may receive job search and placement assistance, adult basic education, ESL and GED preparation, vocational training, or support services such as child care and housing support, as well as some type of work experience, paid or unpaid. Most studies define the adult population to be age 18 and over. Treatment may be sequential, where participants first undergo training and then receive work experience, or follow individualized employment plans for each participant. These programs sometimes take the form of "welfare-to-work" programs, where participants must participate in employment activities to receive welfare benefits. Community organizations, welfare agencies, and federally or state-funded programs administered by state, county, or local government agencies typically provide these services. Programs last anywhere from two months to one year.

Benefit-Cost Summary

Program benefits	
Participants	$4,755
Taxpayers	$3,716
Other (1)	$0
Other (2)	($2,078)
Total	$6,393
Costs	($4,143)
Benefits minus cost	$2,250

Summary statistics	
Benefit to cost ratio	$1.54
Benefits minus costs	$2,250
Probability of a positive net present value	73 %

The estimates shown are present value, life cycle benefits and costs. All dollars are expressed in the base year chosen for this analysis (2014). The economic discount rates and other relevant parameters are described in our technical documentation.

Detailed Monetary Benefit Estimates

Source of benefits	Benefits to Participants	Taxpayers	Other (1)	Other (2)	Total benefits
From primary participant					
Labor market earnings (employment)	$5,549	$2,367	$0	$0	$7,915
Public assistance	($378)	$889	$0	$0	$511
Food assistance	($416)	$461	$0	$0	$44
Adjustment for deadweight cost of program	$0	$0	$0	($2,078)	($2,078)
Totals	$4,755	$3,716	$0	($2,078)	$6,393

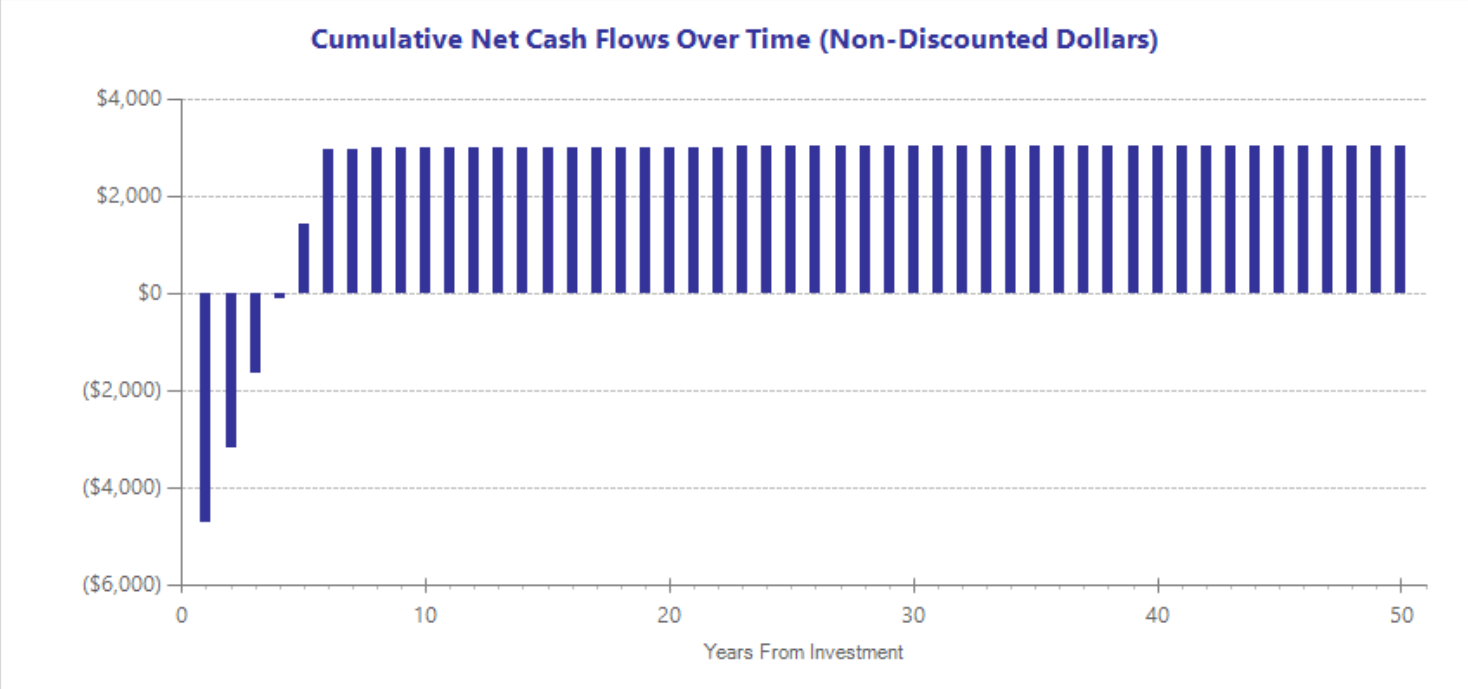
We created the two “other” categories to report results that do not fit neatly in the “participant” or “taxpayer” perspectives. In the “Other (1)” category we include the benefits of reductions in crime victimization, the economic spillover benefits of improvement in human capital outcomes, and the benefits from private or employer-paid health insurance. In the “Other (2)” category we include estimates of the net changes in the value of a statistical life and net changes in the deadweight costs of taxation.

Detailed Cost Estimates

	Annual cost	Program duration	Year dollars	Summary statistics	
Program costs	$4,154	1	2014	Present value of net program costs (in 2014 dollars)	($4,143)
Comparison costs	$0	1	2014	Uncertainty (+ or - %)	43 %

We estimated the average annual cost of treatment per participant, using data from studies in our meta-analysis that reported cost estimates (Auspos et al., 1988; Bell & Orr, 1994; Blomquist, 1995; Bloom et al., 2000; Farrell, 2000; Freedman et al., 2000; Freedman et al., 1995; Hamilton et al., 1997; Riccio et al., 1986; Scrivener et al., 2002; Scrivener et al., 2001; Scrivener et al., 1998; Storto et al., 2000). Costs vary by study but may include administrative costs, employment services, case management, eligibility-related services, foregone earnings, tuition payments, allowances, support services such as transportation assistance and child care costs, and wage subsidies.

The figures shown are estimates of the costs to implement programs in Washington. The comparison group costs reflect either no treatment or treatment as usual, depending on how effect sizes were calculated in the meta analysis. The uncertainty range is used in Monte Carlo risk analysis, described in our technical documentation.



Meta-Analysis of Program Effects

Outcomes measured	Primary or secondary participant	No. of effect sizes	Treatment N	Unadjusted effect size (random effects model)		Adjusted effect sizes and standard errors used in the benefit-cost analysis					
						First time ES is estimated			Second time ES is estimated		
				ES	p-value	ES	SE	Age	ES	SE	Age
Earnings	Primary	36	95653	0.149	0.001	0.146	0.026	39	0.000	0.018	40
Employment	Primary	32	95650	0.094	0.001	0.091	0.014	39	0.000	0.018	40
Food assistance	Primary	19	42878	-0.058	0.001	-0.055	0.010	39	0.000	0.018	40
Public assistance	Primary	38	91383	-0.065	0.001	-0.064	0.015	39	0.000	0.028	40

Citations Used in the Meta-Analysis

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Job search and placement

Benefit-cost estimates updated December 2015. Literature review updated November 2015.

Program Description: Unemployed individuals conduct a supervised job search, attend job search workshops or participate in job clubs, similar to peer support groups for the unemployed. This intervention is very brief, lasting anywhere from a few hours in one day to two months. State Unemployment Insurance (UI) programs, employment departments, and welfare agencies usually provide these program services. UI claimants and TANF/AFDC recipients are the most common participants.

Benefit-Cost Summary

Program benefits	
Participants	$676
Taxpayers	$1,495
Other (1)	$0
Other (2)	($256)
Total	$1,915
Costs	($513)
Benefits minus cost	$1,402

Summary statistics	
Benefit to cost ratio	$3.73
Benefits minus costs	$1,402
Probability of a positive net present value	64 %

The estimates shown are present value, life cycle benefits and costs. All dollars are expressed in the base year chosen for this analysis (2014). The economic discount rates and other relevant parameters are described in our technical documentation.

Detailed Monetary Benefit Estimates

Source of benefits	Benefits to Participants	Taxpayers	Other (1)	Other (2)	Total benefits
From primary participant					
Labor market earnings (employment)	$1,110	$474	$0	$0	$1,584
Public assistance	($434)	$1,021	$0	$0	$587
Adjustment for deadweight cost of program	$0	$0	$0	($256)	($256)
Totals	$676	$1,495	$0	($256)	$1,915

We created the two “other” categories to report results that do not fit neatly in the “participant” or “taxpayer” perspectives. In the “Other (1)” category we include the benefits of reductions in crime victimization, the economic spillover benefits of improvement in human capital outcomes, and the benefits from private or employer-paid health insurance. In the “Other (2)” category we include estimates of the net changes in the value of a statistical life and net changes in the deadweight costs of taxation.

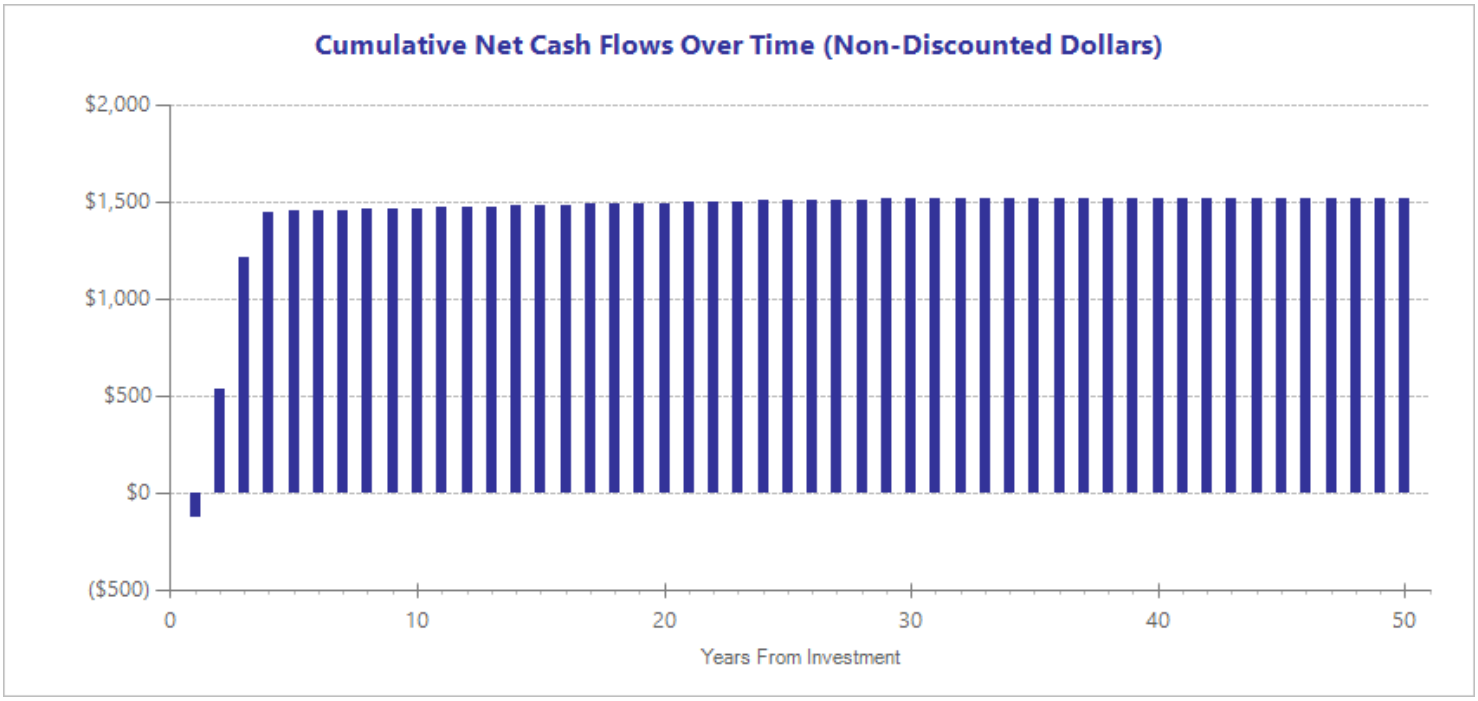
Detailed Cost Estimates

	Annual cost	Program duration	Year dollars
Program costs	$515	1	2014
Comparison costs	$0	1	2014

Summary statistics	
Present value of net program costs (in 2014 dollars)	($513)
Uncertainty (+ or - %)	56 %

We estimated the average annual cost of treatment per participant, using data from studies in our meta-analysis that reported cost estimates (Corson et al., 1985; Corson & Haimson, 1996; Friedlander et al., 1987; Goldman et al., 1986; Goldman et al., 1981; Vinokur et al., 1991; Wolfhagen & Goldman, 1983). Costs vary by study but may include administrative costs, operating costs, transportation payments, lunches, child care and work-releated expenses, staff salaries, and sometimes small stipends for clients.

The figures shown are estimates of the costs to implement programs in Washington. The comparison group costs reflect either no treatment or treatment as usual, depending on how effect sizes were calculated in the meta analysis. The uncertainty range is used in Monte Carlo risk analysis, described in our technical documentation.



Meta-Analysis of Program Effects

Outcomes measured	Primary or secondary participant	No. of effect sizes	Treatment N	Unadjusted effect size (random effects model)		Adjusted effect sizes and standard errors used in the benefit-cost analysis					
						First time ES is estimated			Second time ES is estimated		
				ES	p-value	ES	SE	Age	ES	SE	Age
Earnings	Primary	8	13539	0.038	0.103	0.038	0.024	38	0.000	0.017	40
Employment	Primary	9	14174	0.081	0.030	0.081	0.037	38	0.000	0.017	40
Public assistance	Primary	5	6841	-0.070	0.001	-0.070	0.017	38	0.000	0.017	40

Citations Used in the Meta-Analysis

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Training with work experience for adults, not targeting welfare recipients

Benefit-cost estimates updated December 2015. Literature review updated November 2015.

Program Description: Unemployed adults may receive job search and placement assistance, adult basic education, ESL and GED preparation, vocational training, or support services such as child care and housing support, as well as some type of work experience, paid or unpaid. Most studies define the adult population to be age 18 and over. Treatment may be sequential, where participants first undergo training and then receive work experience, or follow individualized employment plans for each participant. Community organizations, Unemployment Insurance programs, or federally or state-funded programs administered by state, county, or local government agencies typically provide these services to dislocated workers or low-income individuals. The low-income population is defined in a variety of ways, including all workers in the 25th percentile of hourly wages, individuals at or below 130% of the federal poverty line, individuals at or below 200% of the federal poverty line, or an income that meets eligibility requirements for welfare or food stamps. Programs last anywhere from two to eighteen months.

Benefit-Cost Summary

Program benefits	
Participants	$5,031
Taxpayers	$2,266
Other (1)	$0
Other (2)	($2,050)
Total	$5,247
Costs	($4,107)
Benefits minus cost	$1,140

Summary statistics	
Benefit to cost ratio	$1.28
Benefits minus costs	$1,140
Probability of a positive net present value	54 %

The estimates shown are present value, life cycle benefits and costs. All dollars are expressed in the base year chosen for this analysis (2014). The economic discount rates and other relevant parameters are described in our technical documentation.

Detailed Monetary Benefit Estimates

Source of benefits	Benefits to				
	Participants	Taxpayers	Other (1)	Other (2)	Total benefits
From primary participant					
Labor market earnings (employment)	$5,051	$2,154	$0	$0	$7,205
Public assistance	($71)	$168	$0	$0	$96
Food assistance	$51	($57)	$0	$0	($5)
Adjustment for deadweight cost of program	$0	$0	$0	($2,050)	($2,050)
Totals	$5,031	$2,266	$0	($2,050)	$5,247

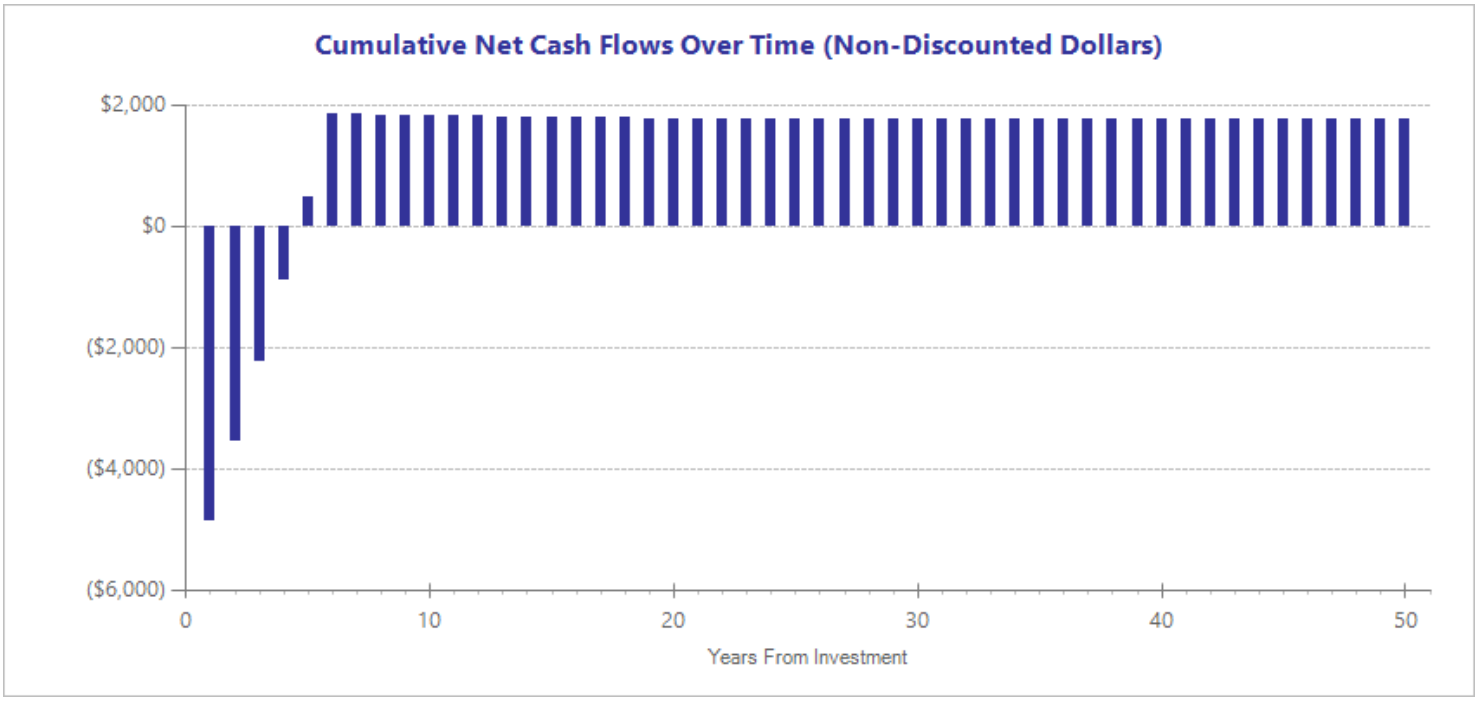
We created the two “other” categories to report results that do not fit neatly in the “participant” or “taxpayer” perspectives. In the “Other (1)” category we include the benefits of reductions in crime victimization, the economic spillover benefits of improvement in human capital outcomes, and the benefits from private or employer-paid health insurance. In the “Other (2)” category we include estimates of the net changes in the value of a statistical life and net changes in the deadweight costs of taxation.

Detailed Cost Estimates

	Annual cost	Program duration	Year dollars	Summary statistics	
Program costs	$4,102	1	2014	Present value of net program costs (in 2014 dollars)	($4,107)
Comparison costs	$0	1	2014	Uncertainty (+ or - %)	66 %

We estimated the average annual cost of treatment per participant, using data from studies in our meta-analysis that reported cost estimates (Corson & Haimson, 1996; Decker et al., 2000; Farrell, 2000; Hollenbeck, 2009; Hollenbeck & Huang, 2003; Schochet et al., 2012). Costs vary by study but may include administrative costs, employment services, case management, eligibility-related services, foregone earnings, tuition payments, allowances, support services such as transportation assistance and child care costs, and wage subsidies.

The figures shown are estimates of the costs to implement programs in Washington. The comparison group costs reflect either no treatment or treatment as usual, depending on how effect sizes were calculated in the meta analysis. The uncertainty range is used in Monte Carlo risk analysis, described in our technical documentation.



Meta-Analysis of Program Effects

Outcomes measured	Primary or secondary participant	No. of effect sizes	Treatment N	Unadjusted effect size (random effects model)		Adjusted effect sizes and standard errors used in the benefit-cost analysis					
						First time ES is estimated			Second time ES is estimated		
				ES	p-value	ES	SE	Age	ES	SE	Age
Earnings	Primary	17	59470	0.048	0.031	0.045	0.021	47	0.000	0.018	48
Employment	Primary	15	48173	0.082	0.239	0.079	0.066	47	0.000	0.018	48
Food assistance	Primary	6	14460	0.007	0.827	0.007	0.030	47	0.000	0.018	48
Public assistance	Primary	6	14984	-0.014	0.627	-0.012	0.026	47	0.000	0.018	48

Citations Used in the Meta-Analysis

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Work experience

Benefit-cost estimates updated December 2015. Literature review updated November 2015.

Program Description: Unemployed clients receive work experience, ranging from unpaid community service jobs to paid (partially or fully subsidized) jobs in the private, public, or nonprofit sector. Clients often participate in work experience after failing to find unemployment through job search and placement assistance. These programs sometimes take the form of "welfare-to-work" programs, where participants must participate in job searches or work experience to receive welfare benefits. For paid employment, employers may or may not be required to retain employees after wage subsidies end. Welfare agencies and community organizations typically provide these program services to TANF/AFDC recipients, offenders, or low-income individuals, lasting anywhere from one month to one year. The low-income population is defined in a variety of ways, including all workers in the 25th percentile of hourly wages, individuals at or below 130% of the federal poverty line, individuals at or below 200% of the federal poverty line, or an income that meets eligibility requirements for welfare or food stamps.

Benefit-Cost Summary

Program benefits	
Participants	$1,619
Taxpayers	$2,512
Other (1)	$0
Other (2)	($1,023)
Total	$3,108
Costs	($2,057)
Benefits minus cost	$1,052

Summary statistics	
Benefit to cost ratio	$1.51
Benefits minus costs	$1,052
Probability of a positive net present value	73 %

The estimates shown are present value, life cycle benefits and costs. All dollars are expressed in the base year chosen for this analysis (2014). The economic discount rates and other relevant parameters are described in our technical documentation.

Detailed Monetary Benefit Estimates

Source of benefits	Benefits to: Participants	Taxpayers	Other (1)	Other (2)	Total benefits
From primary participant					
Labor market earnings (employment)	$2,437	$1,039	$0	$0	$3,476
Public assistance	($455)	$1,070	$0	$0	$615
Food assistance	($364)	$402	$0	$0	$39
Adjustment for deadweight cost of program	$1	$0	$0	($1,023)	($1,022)
Totals	$1,619	$2,512	$0	($1,023)	$3,108

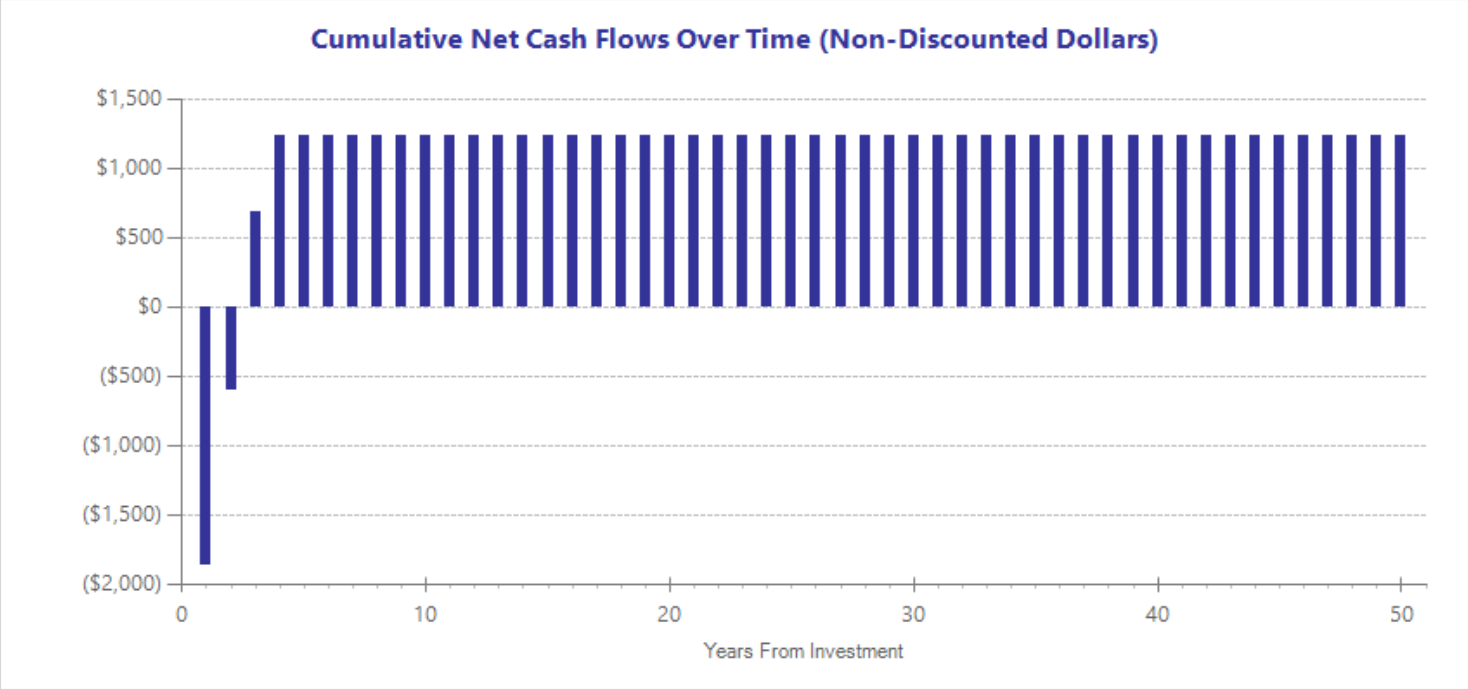
We created the two "other" categories to report results that do not fit neatly in the "participant" or "taxpayer" perspectives. In the "Other (1)" category we include the benefits of reductions in crime victimization, the economic spillover benefits of improvement in human capital outcomes, and the benefits from private or employer-paid health insurance. In the "Other (2)" category we include estimates of the net changes in the value of a statistical life and net changes in the deadweight costs of taxation.

Detailed Cost Estimates

	Annual cost	Program duration	Year dollars	Summary statistics	
Program costs	$2,052	1	2014	Present value of net program costs (in 2014 dollars)	($2,057)
Comparison costs	$0	1	2014	Uncertainty (+ or - %)	62 %

We estimated the average annual cost of treatment per participant, using data from studies in our meta-analysis that reported cost estimates (Duncan et al., 2008; Freedman et al., 1988; Friedlander et al., 1987; Friedlander et al., 1986; Friedlander et al., 1985; Goldman et al., 1986; Hamilton & Friedlander, 1989; Redcross et al., 2012). Costs vary by study but may include costs of program registration, orientation, administration, operations, case management, wage subsidies, earnings supplements, health care, transportation, and child care subsidies.

The figures shown are estimates of the costs to implement programs in Washington. The comparison group costs reflect either no treatment or treatment as usual, depending on how effect sizes were calculated in the meta analysis. The uncertainty range is used in Monte Carlo risk analysis, described in our technical documentation.



Meta-Analysis of Program Effects

Outcomes measured	Primary or secondary participant	No. of effect sizes	Treatment N	Unadjusted effect size (random effects model)		Adjusted effect sizes and standard errors used in the benefit-cost analysis					
						First time ES is estimated			Second time ES is estimated		
				ES	p-value	ES	SE	Age	ES	SE	Age
Earnings	Primary	15	15792	0.091	0.001	0.091	0.026	35	0.000	0.001	37
Employment	Primary	14	14699	0.092	0.001	0.092	0.025	35	0.000	0.001	37
Food assistance	Primary	3	2222	-0.046	0.446	-0.046	0.061	35	0.000	0.001	37
Public assistance	Primary	13	14332	-0.074	0.001	-0.074	0.018	35	0.000	0.001	37

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Case management for welfare recipients or low-income individuals

Benefit-cost estimates updated December 2015. Literature review updated November 2015.

Program Description: Case managers work with TANF/AFDC recipients or low-income individuals in individual or group sessions to provide counseling, job search assistance or job retention services through orientations, assessments, interviews, or telephone calls. Case managers usually provide referrals to child care subsidies, transportation assistance, and other support services. They may also refer clients to education and training, particularly if job searches are unsuccessful. Case management may end when clients find employment, or continue with post-employment support services. The low-income population is defined in a variety of ways, including all workers in the 25th percentile of hourly wages, individuals at or below 130% of the federal poverty line, individuals at or below 200% of the federal poverty line, or an income that meets eligibility requirements for welfare or food stamps. Nonprofit organizations, local welfare agencies, or for-profit employment companies usually provide these program services, lasting anywhere from one month to two years.

Benefit-Cost Summary

Program benefits	
Participants	$212
Taxpayers	$270
Other (1)	$0
Other (2)	($1,460)
Total	($977)
Costs	($2,908)
Benefits minus cost	($3,885)

Summary statistics	
Benefit to cost ratio	($0.34)
Benefits minus costs	($3,885)
Probability of a positive net present value	15 %

The estimates shown are present value, life cycle benefits and costs. All dollars are expressed in the base year chosen for this analysis (2014). The economic discount rates and other relevant parameters are described in our technical documentation.

Detailed Monetary Benefit Estimates

Source of benefits	Benefits to Participants	Taxpayers	Other (1)	Other (2)	Total benefits
From primary participant					
Labor market earnings (employment)	$254	$108	$0	$0	$362
Public assistance	($93)	$219	$0	$0	$126
Food assistance	$52	($57)	$0	$0	($5)
Adjustment for deadweight cost of program	$0	$0	$0	($1,460)	($1,459)
Totals	$212	$270	$0	($1,460)	($977)

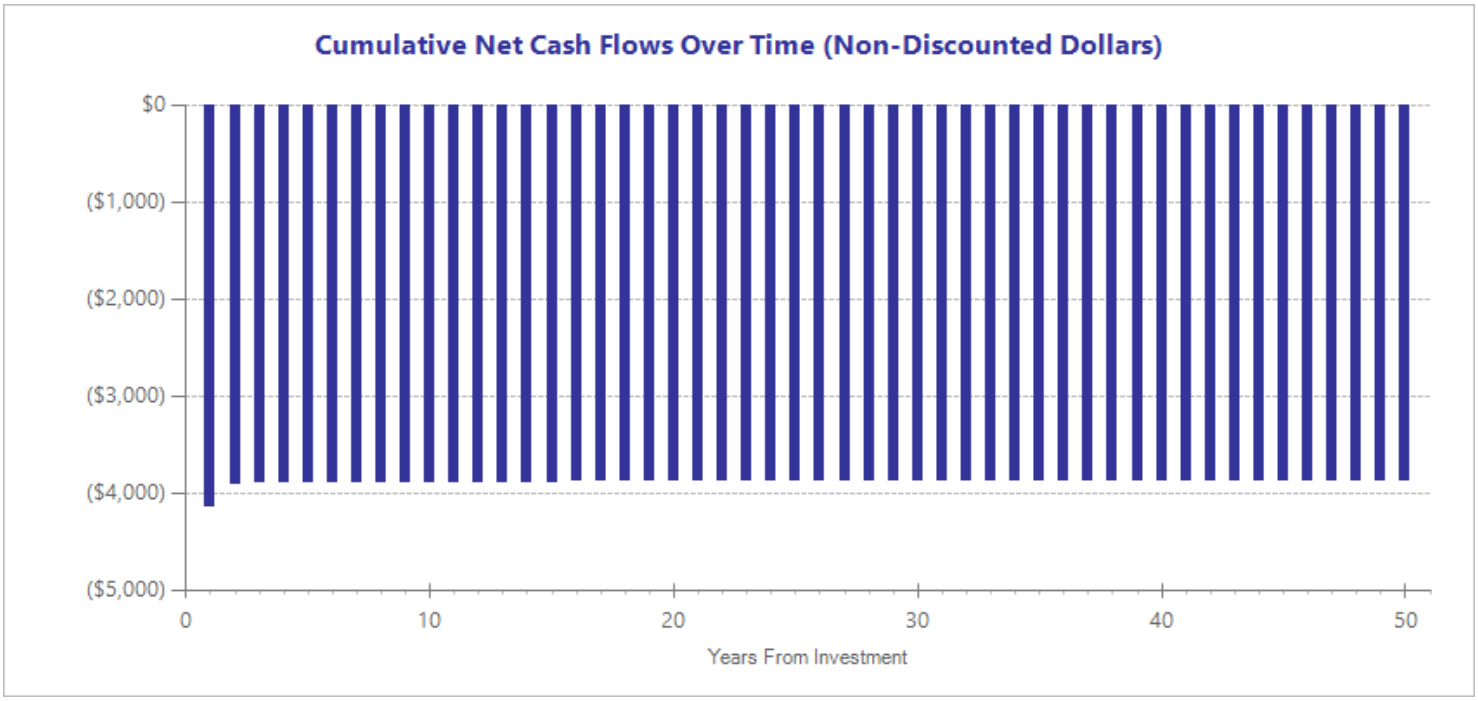
We created the two “other” categories to report results that do not fit neatly in the “participant” or “taxpayer” perspectives. In the “Other (1)” category we include the benefits of reductions in crime victimization, the economic spillover benefits of improvement in human capital outcomes, and the benefits from private or employer-paid health insurance. In the “Other (2)” category we include estimates of the net changes in the value of a statistical life and net changes in the deadweight costs of taxation.

Detailed Cost Estimates

	Annual cost	Program duration	Year dollars	Summary statistics	
Program costs	$2,911	1	2014	Present value of net program costs (in 2014 dollars)	($2,908)
Comparison costs	$0	1	2014	Uncertainty (+ or - %)	99 %

We estimated the average annual cost of treatment per participant, using data from studies in our meta-analysis that reported cost estimates (Hamilton et al., 1996; Kemple et al., 1995; Kornfeld & Rupp, 2000; Miller et al., 2008; Roder & Scrivner, 2005). Costs vary by study but may include central administration, staff salaries, staff benefits, recruitment, assessment services, job placement and retention services, short-term training provided by staff, transportation, and medical treatments.

The figures shown are estimates of the costs to implement programs in Washington. The comparison group costs reflect either no treatment or treatment as usual, depending on how effect sizes were calculated in the meta analysis. The uncertainty range is used in Monte Carlo risk analysis, described in our technical documentation.



Meta-Analysis of Program Effects

Outcomes measured	Primary or secondary participant	No. of effect sizes	Treatment N	Unadjusted effect size (random effects model)		Adjusted effect sizes and standard errors used in the benefit-cost analysis					
						First time ES is estimated			Second time ES is estimated		
				ES	p-value	ES	SE	Age	ES	SE	Age
Earnings	Primary	16	30680	0.015	0.096	0.015	0.009	35	0.000	0.014	36
Employment	Primary	15	26520	0.032	0.085	0.032	0.018	35	0.000	0.014	36
Food assistance	Primary	10	22854	0.007	0.688	0.007	0.016	35	0.000	0.014	36
Public assistance	Primary	11	25001	-0.015	0.469	-0.015	0.020	35	0.000	0.014	36

Citations Used in the Meta-Analysis

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Case management for former welfare recipients

Benefit-cost estimates updated December 2015. Literature review updated November 2015.

Program Description: Case managers work with former TANF/AFDC recipients, often in low-wage jobs, in individual or group sessions to provide counseling, job search assistance or job retention services through orientations, assessments, interviews, or telephone calls. Case managers often provide referrals to child care subsidies, transportation assistance, and other support services. They may also refer clients to education and training, particularly if job searches are unsuccessful. Welfare agencies and state employment departments provide program services for approximately one year.

Benefit-Cost Summary

Program benefits	
Participants	$54
Taxpayers	$440
Other (1)	$0
Other (2)	($1,470)
Total	($977)
Costs	($2,923)
Benefits minus cost	($3,900)

Summary statistics	
Benefit to cost ratio	($0.33)
Benefits minus costs	($3,900)
Probability of a positive net present value	18 %

The estimates shown are present value, life cycle benefits and costs. All dollars are expressed in the base year chosen for this analysis (2014). The economic discount rates and other relevant parameters are described in our technical documentation.

Detailed Monetary Benefit Estimates

Source of benefits	Benefits to: Participants	Taxpayers	Other (1)	Other (2)	Total benefits
From primary participant					
Labor market earnings (employment)	$248	$106	$0	$0	$354
Public assistance	($96)	$225	$0	$0	$129
Food assistance	($98)	$109	$0	$0	$10
Adjustment for deadweight cost of program	$0	$0	$0	($1,470)	($1,470)
Totals	$54	$440	$0	($1,470)	($977)

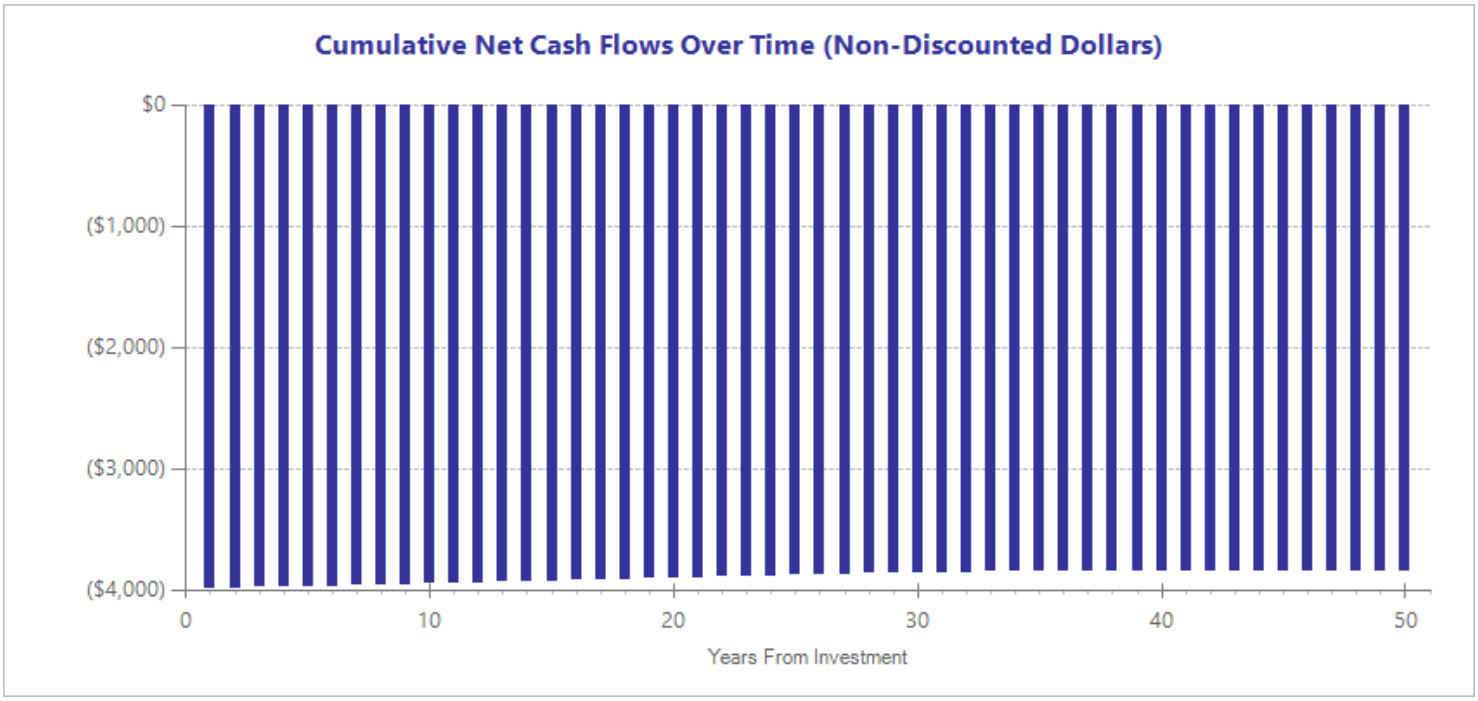
We created the two "other" categories to report results that do not fit neatly in the "participant" or "taxpayer" perspectives. In the "Other (1)" category we include the benefits of reductions in crime victimization, the economic spillover benefits of improvement in human capital outcomes, and the benefits from private or employer-paid health insurance. In the "Other (2)" category we include estimates of the net changes in the value of a statistical life and net changes in the deadweight costs of taxation.

Detailed Cost Estimates

	Annual cost	Program duration	Year dollars	Summary statistics	
Program costs	$2,911	1	2014	Present value of net program costs (in 2014 dollars)	($2,923)
Comparison costs	$0	1	2014	Uncertainty (+ or - %)	99 %

We estimated the average annual cost of treatment per participant, using data from studies in our meta-analysis that reported cost estimates (Hamilton et al., 1996; Kemple et al., 1995; Kornfeld & Rupp, 2000; Miller et al., 2008; Roder & Scrivner, 2005). Costs vary by study but may include central administration, staff salaries, staff benefits, recruitment, assessment services, job placement and retention services, short-term training provided by staff, transportation, and medical treatments.

The figures shown are estimates of the costs to implement programs in Washington. The comparison group costs reflect either no treatment or treatment as usual, depending on how effect sizes were calculated in the meta analysis. The uncertainty range is used in Monte Carlo risk analysis, described in our technical documentation.



Meta-Analysis of Program Effects

Outcomes measured	Primary or secondary participant	No. of effect sizes	Treatment N	Unadjusted effect size (random effects model)		Adjusted effect sizes and standard errors used in the benefit-cost analysis					
						First time ES is estimated			Second time ES is estimated		
				ES	p-value	ES	SE	Age	ES	SE	Age
Earnings	Primary	7	3393	0.025	0.309	0.025	0.024	32	0.000	0.014	33
Employment	Primary	7	3377	0.019	0.517	0.019	0.030	32	0.000	0.014	33
Food assistance	Primary	7	4396	-0.012	0.578	-0.012	0.021	32	0.000	0.103	33
Public assistance	Primary	7	4396	-0.015	0.482	-0.015	0.021	32	0.000	0.014	33

Citations Used in the Meta-Analysis

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Training, no work experience

Benefit-cost estimates updated December 2015. Literature review updated November 2015.

Program Description: Participants receive job search and placement assistance, adult basic education, ESL and GED preparation, vocational training, or support services such as child care and housing support. Training targets occupations as diverse as electromechanics, nursing, and construction, among many others. Some of these programs take place at community colleges, targeting adults who failed to graduate high school, while others occur at proprietary trade schools and colleges. Community-based organizations and welfare agencies may also provide these program services. They typically target TANF/AFDC recipients, dislocated workers, or low-income individuals, lasting anywhere from one month to two years. The low-income population is defined in a variety of ways, including all workers in the 25th percentile of hourly wages, individuals at or below 130% of the federal poverty line, individuals at or below 200% of the federal poverty line, or an income that meets eligibility requirements for welfare or food stamps.

Benefit-Cost Summary

Program benefits	
Participants	$5,914
Taxpayers	$2,293
Other (1)	$0
Other (2)	($4,178)
Total	$4,030
Costs	($8,292)
Benefits minus cost	($4,263)

Summary statistics	
Benefit to cost ratio	$0.49
Benefits minus costs	($4,263)
Probability of a positive net present value	40 %

The estimates shown are present value, life cycle benefits and costs. All dollars are expressed in the base year chosen for this analysis (2014). The economic discount rates and other relevant parameters are described in our technical documentation.

Detailed Monetary Benefit Estimates

Source of benefits	Benefits to Participants	Taxpayers	Other (1)	Other (2)	Total benefits
From primary participant					
Labor market earnings (employment)	$5,795	$2,472	$0	$0	$8,267
Public assistance	$38	($89)	$0	$0	($51)
Food assistance	$81	($90)	$0	$0	($9)
Adjustment for deadweight cost of program	$0	$0	$0	($4,178)	($4,178)
Totals	$5,914	$2,293	$0	($4,178)	$4,030

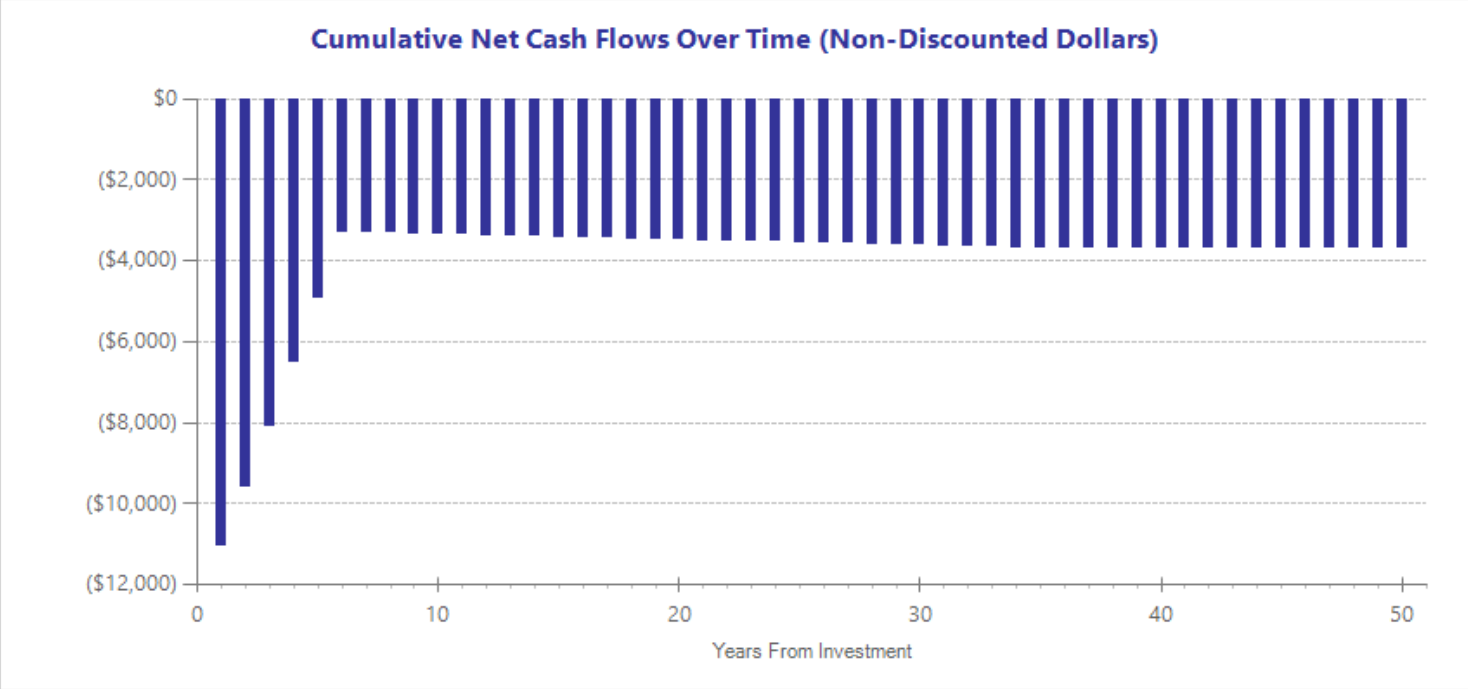
We created the two “other” categories to report results that do not fit neatly in the “participant” or “taxpayer” perspectives. In the “Other (1)” category we include the benefits of reductions in crime victimization, the economic spillover benefits of improvement in human capital outcomes, and the benefits from private or employer-paid health insurance. In the “Other (2)” category we include estimates of the net changes in the value of a statistical life and net changes in the deadweight costs of taxation.

Detailed Cost Estimates

	Annual cost	Program duration	Year dollars	Summary statistics	
Program costs	$8,284	1	2014	Present value of net program costs (in 2014 dollars)	($8,292)
Comparison costs	$0	1	2014	Uncertainty (+ or - %)	31 %

We estimated the average annual cost of treatment per participant, using data from studies in our meta-analysis that reported cost estimates (Bloom et al., 2002; Burghardt et al., 1992; Cave et al., 1993; Hollenbeck & Huang, 2014; Hollenbeck & Huang, 2006; Hollenbeck & Huang, 2003). Costs vary by study but may include foregone earnings, foregone tax receipts, tuition payments if any, support services such as transportation and child care, medical/dental services, and safety net services.

The figures shown are estimates of the costs to implement programs in Washington. The comparison group costs reflect either no treatment or treatment as usual, depending on how effect sizes were calculated in the meta analysis. The uncertainty range is used in Monte Carlo risk analysis, described in our technical documentation.



Meta-Analysis of Program Effects

Outcomes measured	Primary or secondary participant	No. of effect sizes	Treatment N	Unadjusted effect size (random effects model)		Adjusted effect sizes and standard errors used in the benefit-cost analysis					
						First time ES is estimated			Second time ES is estimated		
				ES	p-value	ES	SE	Age	ES	SE	Age
Earnings	Primary	41	289201	0.062	0.001	0.062	0.013	37	0.000	0.032	38
Employment	Primary	41	289201	0.085	0.001	0.085	0.024	37	0.000	0.032	38
Food assistance	Primary	25	171188	0.011	0.163	0.011	0.008	37	0.000	0.032	38
Public assistance	Primary	25	169101	0.006	0.446	0.006	0.008	37	0.000	0.032	38

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Training with work experience for youth

Benefit-cost estimates updated December 2015. Literature review updated November 2015.

Program Description: Youth ages 16-24 may receive job search and placement assistance, adult basic education, ESL and GED preparation, vocational training, or support services such as child care and housing support, as well as some type of work experience, paid or unpaid. Treatment may be sequential, where participants first undergo training and then receive work experience, or follow individualized employment plans for each participant. Community organizations, welfare agencies, and federally or state-funded programs administered by state, county, or local government agencies typically provide these services to low-income youth. We do not include programs that target youth still attending high school, so these participants are often high school dropouts. The low-income population is defined in a variety of ways, including all workers in the 25th percentile of hourly wages, individuals at or below 130% of the federal poverty line, individuals at or below 200% of the federal poverty line, or an income that meets eligibility requirements for welfare or food stamps. Programs may last anywhere from two to ten months.

Benefit-Cost Summary

Program benefits	
Participants	$133
Taxpayers	$726
Other (1)	$206
Other (2)	($3,649)
Total	($2,584)
Costs	($7,364)
Benefits minus cost	($9,948)

Summary statistics	
Benefit to cost ratio	($0.35)
Benefits minus costs	($9,948)
Probability of a positive net present value	33 %

The estimates shown are present value, life cycle benefits and costs. All dollars are expressed in the base year chosen for this analysis (2014). The economic discount rates and other relevant parameters are described in our technical documentation.

Detailed Monetary Benefit Estimates

Source of benefits	Benefits to				
	Participants	Taxpayers	Other (1)	Other (2)	Total benefits
From primary participant					
Crime	$0	$87	$206	$43	$336
Labor market earnings (employment)	$284	$121	$0	$0	$404
Public assistance	($282)	$662	$0	$0	$381
Food assistance	$130	($144)	$0	$0	($14)
Adjustment for deadweight cost of program	$1	$0	$0	($3,692)	($3,692)
Totals	$133	$726	$206	($3,649)	($2,584)

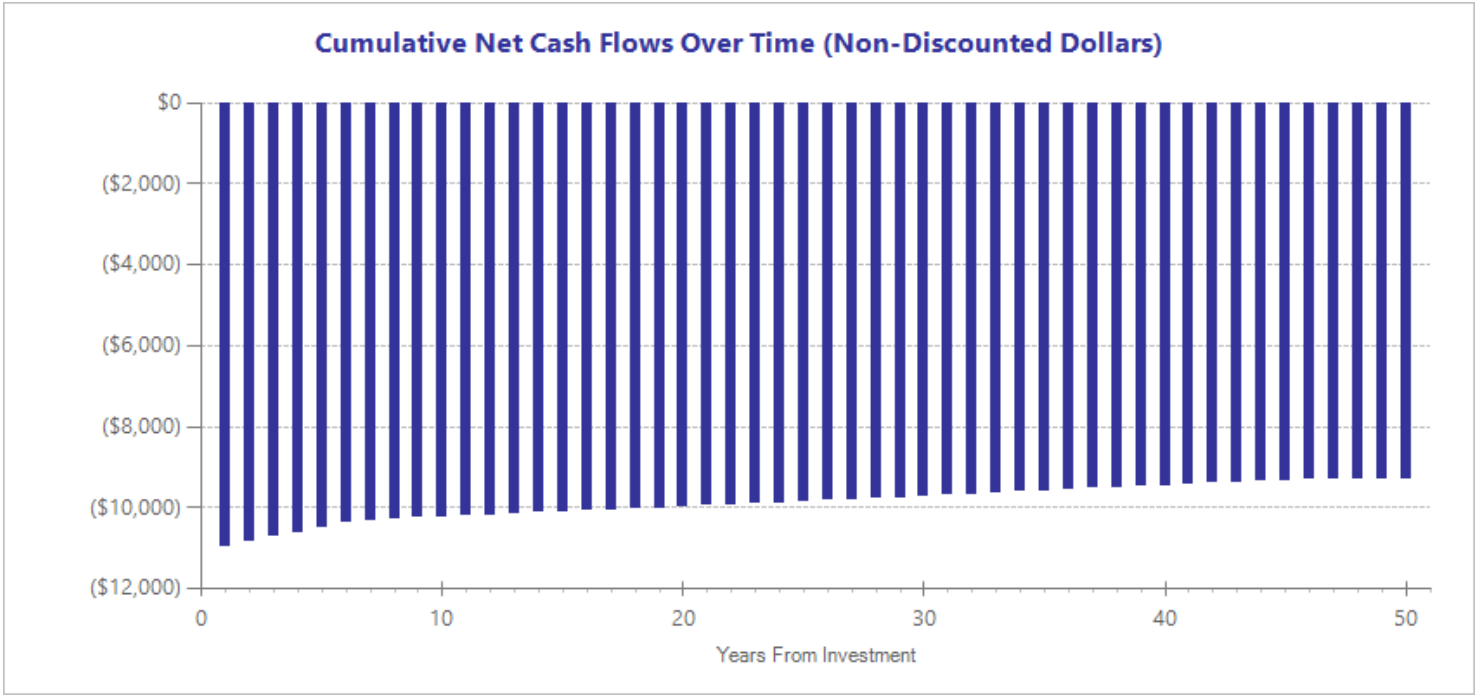
We created the two “other” categories to report results that do not fit neatly in the “participant” or “taxpayer” perspectives. In the “Other (1)” category we include the benefits of reductions in crime victimization, the economic spillover benefits of improvement in human capital outcomes, and the benefits from private or employer-paid health insurance. In the “Other (2)” category we include estimates of the net changes in the value of a statistical life and net changes in the deadweight costs of taxation.

Detailed Cost Estimates

	Annual cost	Program duration	Year dollars	Summary statistics	
Program costs	$7,356	1	2014	Present value of net program costs (in 2014 dollars)	($7,364)
Comparison costs	$0	1	2014	Uncertainty (+ or - %)	48 %

We estimated the average annual cost of treatment per participant, using data from studies in our meta-analysis that reported cost estimates (Hollenbeck & Huang, 2003; Kerachsky et al., 1985; Orr et al., 1996; Quint et al., 1997). Costs vary by study but may include administrative costs, employment services, case management, eligibility-related services, foregone earnings, tuition payments, allowances, support services such as transportation assistance and child care costs, and wage subsidies.

The figures shown are estimates of the costs to implement programs in Washington. The comparison group costs reflect either no treatment or treatment as usual, depending on how effect sizes were calculated in the meta analysis. The uncertainty range is used in Monte Carlo risk analysis, described in our technical documentation.



Meta-Analysis of Program Effects

Outcomes measured	Primary or secondary participant	No. of effect sizes	Treatment N	Unadjusted effect size (random effects model)		Adjusted effect sizes and standard errors used in the benefit-cost analysis					
						First time ES is estimated			Second time ES is estimated		
				ES	p-value	ES	SE	Age	ES	SE	Age
Crime	Primary	5	5479	-0.049	0.097	-0.030	0.030	25	-0.030	0.030	35
Earnings	Primary	9	11129	0.004	0.882	0.001	0.025	25	0.000	0.018	26
Employment	Primary	6	7923	0.012	0.840	0.006	0.053	25	0.000	0.018	26
Food assistance	Primary	7	6474	0.016	0.455	0.018	0.022	25	0.000	0.018	26
Public assistance	Primary	8	7887	-0.063	0.003	-0.048	0.022	25	0.000	0.018	26

Citations Used in the Meta-Analysis

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